Before the
FEDERAL COMMUNICATIONS COMMISSION FCC 95-504
Washington, D.C. 20554

In the Matter of	)	
	)	
Telecommunications Services	)	CS Docket No. 95-184
Inside Wiring	)	
	)	
Customer Premises Equipment	)	

NOTICE OF PROPOSED RULEMAKING

Adopted: December 15, 1995; Released: January 26, 1996

By the Commission: Commissioners Barrett and Chong issuing separate statements.

Comment Date: March 18, 1996
Reply Comment Date: April 17, 1996

Table of Contents

I. INTRODUCTION

1. The Commission issues this *Notice of Proposed Rulemaking* ("*NPRM*") to consider changes in our telephone and cable inside wiring rules and policies in light of today's evolving and converging telecommunications marketplace. Because this proceeding will

consider the issue of parity between our telephone and cable inside wiring rules, we are granting a petition for rulemaking (RM 8380) filed jointly by the Media Access Project, the United States Telephone Association and Citizens for a Sound Economy Foundation (collectively, "MAP"),[1] to the extent that MAP urges the Commission to establish a proceeding to consider making cable home wiring rules the same as those governing telephone inside wiring.[2]

2. The Commission's current telephone and cable inside wiring rules were developed in separate proceedings at a time when telephone companies typically provided only telephone service over "twisted pair" copper wiring, and cable operators typically provided only video programming services over coaxial cable. The statutory frameworks used to regulate the industries are likewise distinct: telephone companies are regulated as common carriers under Title II of the Communications Act; cable operators are regulated under Title VI. These seemingly simple dichotomies, however, are dissolving as technology advances and the marketplace changes. First, telephone companies and cable operators have begun to enter each other's businesses. Some telephone companies -- under the Commission's video dialtone rules or as traditional cable operators -- are beginning to provide video programming services within their telephone service areas, and cable operators are actively pursuing plans to offer telephony. The Commission has encouraged such ventures in order to increase competition in the cable and telephone markets. In addition, it is likely that not only will the types of services offered become increasingly similar, but the facilities used to deliver those services will become increasingly similar. As telephone companies and cable operators upgrade their systems to offer telephony, data and video programming services -- sometimes over a single wire -- the type of wiring and the wiring configurations used may become indistinguishable. For instance, telephone companies and cable operators undergoing significant system upgrades both have chosen to deploy fiber optic wiring for the common "trunk" lines, with coaxial cable or twisted-pair wiring used to connect to individual end users.

3. As the historically separate identities of telecommunications service providers break down, we anticipate that certain differences between our cable and telephone inside wiring rules may cause confusion and impede the development of competition. For example:

---

[1] Petition for Rulemaking, Media Access Project, the United States Telephone Association and Citizens for a Sound Economy Foundation, filed July 27, 1993.

[2] We also note that, concurrently with the adoption of this *NPRM*, we issue a *First Order on Reconsideration and Further Notice of Proposed Rulemaking* in MM Docket No. 92-260 regarding our cable home wiring rules under Section 16(d) of the Cable Television Consumer Protection and Competition Act of 1992 ("1992 Cable Act"), Pub. L. No. 102-385, 106 Stat. 1460 (1992), 47 U.S.C. § 521, *et seq.* We incorporate the record in MM Docket No. 92-260 herein by reference.

(a) For single family homes, the cable demarcation point generally is set at (or about) 12 inches *outside* of where the cable wire enters the subscriber's premises,[3] while the telephone demarcation point generally is set up to 12 inches *inside* of the customer's premises.[4] We believe that elimination of this difference may be necessary where, for example, a service provider delivers both telephony and video programming over a single wire.

(b) Our cable rules provide safeguards against potentially dangerous broadband signal leakage, which can interfere with frequencies used for over-the-air communications, such as aeronautical communications.[5] Our telephone regulations do not address this concern because telephony has traditionally been carried over narrowband wire that uses a different part of the frequency spectrum. It is vital that we explore how best to extend our signal leakage protections to broadband service providers, regardless of the type of service they provide.

(c) Our rules regarding consumers' access to inside wiring may also need clarification as cable and telephone technologies converge. In general, access to telephone inside wiring is deregulated -- i.e., telephone subscribers are free to install, maintain, or reconfigure the telephone wiring inside the demarcation point.[6] On the other hand, our rules do not prevent cable operators from asserting continued control and ownership over installed cable inside wiring before termination of service.[7] If a future provider were to deliver both telephony and cable over a single wire, this distinction could produce confusion and uncertainty.

4. We expect that at least some consumers may soon have a choice of two or more

---

[3] 47 C.F.R. § 76.5(mm)(1) (demarcation point for single unit installations). Among other purposes, the demarcation point defines the point from which the subscriber may purchase the wiring upon termination of service.

[4] 47 C.F.R. § 68.3(a) (demarcation point for single unit installations). Specifically, the rule sets the point for new and existing single unit installations at a point within 12 inches of the protector or, where there is no protector, within 12 inches of where the telephone wire enters the customer's premises. *Id.* A "protector" is a small box, usually located just outside a residence, that acts as a lightning arrestor or generally as a bidirectional overcurrent protector.

[5] 45 C.F.R. §§ 76.605(a) and 76.610-76.617.

[6] *Memorandum. Opinion and Order* in CC Docket No. 79-105 (In the Matter of Detariffing the Installation and Maintenance of Inside Wiring), 1 FCC Rcd 1190, 1195 (1986) ("*Reconsideration Telephone Inside Wiring Second Report and Order*").

[7] 47 C.F.R. §§ 76.801-76.802.

telecommunications service companies providing telephony, data, video programming and other services. Through this *NPRM*, we seek comment on whether and how we should revise our current telephone and cable inside wiring rules to reflect these new realities and promote competition, by ensuring that the Commission's inside wiring rules continue to facilitate the development of new and diverse services for the American public. In particular, and as described more fully below, we seek comment on whether it is technically and competitively desirable to create a uniform set of inside wiring rules that would apply to telephone companies and cable operators alike, or, in the alternative, that would apply according to the technical characteristics of the service -- e.g., broadband or narrowband -- or the type of wiring used -- e.g., fiber optics, coaxial cable or twisted-pair wiring.

5. As described in detail below, we seek comment on whether certain telephone and cable inside wiring rules need to be revised, harmonized or otherwise changed in light of the rapidly evolving and converging telecommunications marketplace. We seek comment on how the different statutory regimes applicable to cable and telephone networks affect the analysis and the questions we pose herein. Specific issues on which we seek comment include: (a) the location of the demarcation point; (b) technical connection parameters; (c) the regulation of telephone simple and complex inside wiring, and residential and non-residential wiring; (d) subscriber ownership of, or access to, inside wiring; (e) issues arising from the dual regulation of inside wiring by federal and local authorities; (f) service provider access to private property; and (g) the regulation of customer premises equipment used to receive cable and telephone service, respectively.

II. INSIDE WIRING ISSUES

A. Demarcation Point

1. *Background*

6. Section 16(d) of the 1992 Cable Act directs the Commission to "prescribe rules concerning the disposition, after a subscriber to a cable system terminates service, of any cable installed by the cable operator within the premises of such subscriber."[8] The Commission's regulations implementing Section 16(d) provide that, when a customer voluntarily terminates service, the cable operator must give that subscriber the opportunity to acquire the wiring before the operator removes it. The subscriber may purchase the wiring inside his or her premises up to the demarcation point. The cable wiring demarcation point serves such multiple purposes as defining (1) the location at which the subscriber may control the internal home wiring if he or she owns it; (2) the point at which an alternative multichannel video programming service provider would attach its wiring to the subscriber's wiring in order to provide service; and (3) the point from which the customer has the right to purchase cable home wiring upon termination of service. The demarcation point for cable

[8] 47 U.S.C. § 544(i).

home wiring in single unit installations is set at (or about) 12 inches outside of where the cable wire enters the subscriber's premises.[9] The demarcation point for multiple dwelling units is set at (or about) 12 inches outside of where the cable wire enters the subscriber's individual dwelling unit.[10]

7. In multiple dwelling unit buildings, cable wiring configurations fall into two categories: loop-through and non-loop-through. In a loop-through cable wiring system, a single cable provides service to multiple subscribers such that every subscriber on the loop must receive the same cable service.[11] As a result, we exclude loop-through configurations from our discussion herein of a demarcation point within multiple dwelling unit buildings. Generally, in a non-loop-through configuration, each subscriber has a dedicated line (a "drop") running to his or her premises from a common "feeder line."[12] Only the wiring extending from the demarcation point to inside the subscriber's premises constitutes home wiring; thus, the drop wiring from the demarcation point out to the feeder line does not constitute home wiring. The feeder line is the source of video programming signals for everyone in the multiple dwelling unit building. A "tap" or "multi-tap" is a passive device, installed where the drop meets the feeder, that extracts portions of the signal strength in the

---

[9] 47 C.F.R. § 76.5(mm)(1).

[10] 47 C.F.R. § 76.5(mm)(2).

[11] The Commission has excluded loop-through wiring from our rules because its inclusion would give the building manager or the initial subscriber on the loop excessive control over cable service for all other subscribers in the loop. *Report and Order* in MM Docket No. 92-260 ("*Cable Wiring Order*"), 8 FCC Rcd 1435, 1437 (1993). Because loop-through configurations are excluded from the cable home wiring rules, cable operators are not required to offer to sell such wiring to subscribers upon termination of service, and no loop-through subscriber has the right to purchase loop-through cable home wiring. We seek comment, however, in the *Further Notice of Proposed Rulemaking* in MM Docket No. 92-260, adopted concurrently with this *NPRM*, on a proposal by Liberty Cable Company, Inc., that we allow the building owner to purchase the wiring when all of the subscribers on a loop simultaneously decide to switch to an alternative video programming service provider. We also solicit comment on the appropriate demarcation point for this limited application of the cable home wiring rules, and whether we should prohibit, and have the statutory authority to prohibit, future installations of loop-through wiring configurations. *See First Order on Reconsideration and Further Notice of Proposed Rulemaking* in MM Docket No. 92-260, FCC 95-503 (adopted December 15, 1995), at para. 35.

[12] The feeder lines are often called "riser cables" when they travel vertically in a multi-story building, or will travel horizontally between utility poles or underground when used to deliver service to a neighborhood of single dwelling units.

feeder and distributes individual portions to subscribers.[13] The strength of the signals within the feeder decreases each time the signals encounter a tap. In addition, the cable's electrical characteristics cause the strength of the signals to diminish as the signals pass through the coaxial cable. As a result of the signal strength lost through taps and its passage through coaxial cable, periodic amplification is often required within the multiple dwelling unit building to maintain good picture quality. Amplification is accomplished by installing amplifiers at pre-designed intervals along the feeder based upon the number of taps and the length of coaxial cable within the multiple dwelling unit building.

8. With respect to telephone wiring, in 1990, the Commission amended the definition of the telephone demarcation point for simple inside wiring, *inter alia*, to "assure that it [would] not be at a significant distance from where [the] wiring enters the customer's premises."[14] Accordingly, the Commission's rules set the telephone wiring demarcation point for new and existing single unit installations (where there is no protector) at a point within 12 inches of where the telephone wire enters the customer's premises[15] -- i.e., up to 12 inches inside the home. In the case of multiple dwelling unit buildings, the Commission believed in revising its telephone wiring rules that the new demarcation point definition should be flexible enough to accommodate wiring in existing buildings as of August 13, 1990;[16] thus, the telephone demarcation point in existing multiple dwelling unit buildings is determined in accordance with the carrier's reasonable and nondiscriminatory standard operating practices. For new multiple dwelling unit buildings, including additions, modifications and rearrangements of existing wiring, the telephone company may establish a standard operating practice of placing the demarcation point at the minimum point of entry (usually the basement of the building).[17] If the telephone company does not establish such a practice, the owner of a multiple dwelling unit building may determine the location of the demarcation point or

---

[13] Depending on the size of the building, the taps are usually located in a security box or utility closet located on each floor or at a single point in a basement.

[14] *Report and Order and Further Notice of Proposed Rule Making* in CC Docket No. 88-57, (In the Matter of Review of Sections 68.104 and 68.213 of the Commission's Rules Concerning Connection of Simple Inside Wiring to the Telephone Network), 5 FCC Rcd 4686, 4692 (1990) (*"Telephone Inside Wiring Report and Order"), recon. pending.*

[15] *Supra*, n. 4.

[16] *See Telephone Inside Wiring Report and Order*, 5 FCC Rcd at 4693.

[17] The minimum point of entry is defined as either the closest practicable point to where the wiring crosses a property line or the closest practicable point to where the wiring enters a multiple dwelling unit building. 47 C.F.R. § 68.3. The telephone company's reasonable and nondiscriminatory standard operating practice determines which of these two standards applies. *Id.*

points.[18] If there are multiple demarcation points, the demarcation point for any particular customer may not be deeper than 12 inches inside of the customer's premises.[19] Finally, in contrast with cable inside wiring, individual telephone lines typically run from the basement in multiple dwelling unit buildings (where the demarcation point is usually located) to each individual subscriber's dwelling unit.

9. In another Commission proceeding involving the setting of the cable network demarcation point,[20] some alternative multichannel video programming providers argue that the demarcation point in multiple dwelling unit buildings should be located "at that point outside a subscriber's premises and within the common areas of the multiple dwelling unit where existing wiring is first readily accessible" for increased access and subscriber convenience.[21] Because this would allow access to existing cable home wiring at the point it is solely dedicated to serving a single unit, these providers contend that neither the subscriber's individual unit nor the multiple dwelling unit building's common area would be disrupted, and competition would be enhanced by making it easier for the subscriber to switch from one alternative multichannel video programming service provider to another.[22] In addition, some alternative providers argue in this Cable Home Wiring proceeding that the current cable demarcation point for multiple dwelling unit buildings -- at or about 12 inches outside of where the cable wire enters the subscriber's dwelling unit -- makes access more difficult.[23] We note that there was substantial comment by alternative video providers in our Cable Home Wiring proceeding that the current cable demarcation point inhibits competition because either the 12 inch point is physically inaccessible (e.g., buried inside a concrete wall or metal conduit), or is practically inaccessible (e.g., where the building owner will not permit another wire to be strung through the hallways).[24]

10. On the other hand, some cable operators argue in our Cable Home Wiring proceeding that proposals to move the demarcation point for multiple dwelling units to a point outside a subscriber's premises and within the common areas of a multiple dwelling unit

---

[18] 47 C.F.R. § 68.3(b)(2).

[19] 47 C.F.R. §§ 68.3(b)(1)-(2).

[20] The comments discussed below were filed in response to the Commission's *Cable Wiring Order* 8 FCC Rcd 1435 (1993).

[21] *See, e.g.*, Liberty Cable Company, Inc. ("Liberty") Petition for Reconsideration at 1; WJB-TV Limited Partnership Response to Petition for Reconsideration at 3.

[22] *See, e.g.*, Liberty Petition for Reconsideration at 2.

[23] *Id.* at 3.

[24] *Id.* at 3.

building where "existing wiring is first readily available" to alternative providers is not precise enough because such a point could vary from building to building.[25] In addition, cable operators argue that such proposals are contrary to the plain language of the statute, which states that the home wiring rules are to apply to "cable installed by the cable operator within the premises of [the] subscriber," because the wiring which extends from the common wiring (located, for example in a closet) to the premises of the subscriber is arguably not "within the premises" of the subscriber.[26] In addition, some cable service providers state that allowing an alternative service provider to connect to the inside wiring much beyond 12 inches outside the customer's premises invades the common wiring, which incumbent cable operators assert is their property.[27]

11. Cable operators in the same proceeding argue that moving the cable demarcation point would severely restrict their ability to compete to provide telephony and advanced telecommunications services, such as internet access, even if a subscriber chose a competitor's video services.[28] These operators argue that they should be permitted to maintain control over their wire in order to compete to provide such services, rather than have to relinquish their wire to a competitor and be forced to re-wire in the future.[29] Moreover, the cable operators assert that consumers would benefit from additional broadband wires to their premises, since they could then have the flexibility of receiving different broadband services from different providers, rather than simply choosing which single provider's package to receive.

2. *Request for Comment*

12. We seek comment on whether we should establish a common demarcation point for wireline communications networks -- regardless of whether such networks are broadband or narrowband, or cable or telephony services. Sound reasons for creating a common demarcation point may exist. For example, in a world in which cable and telephony services are provided over a single broadband wire, a common demarcation point could make logical and technical sense -- that is, defining different demarcation points for different services

---

[25] *See, e.g.,* National Cable Television Association, Inc. ("NCTA") Opposition to Petitions for Reconsideration at 5; Time Warner Cable Company, Inc. ("TW") Response to Petitions for Reconsideration at 4.

[26] NCTA Opposition to Petitions for Reconsideration at 4-7; TW Response to Petitions for Reconsideration at 4; TKR Cable Company, Inc. ("TKR") Opposition to Petitions for Reconsideration at 2; *see* 47 U.S.C. § 544(i).

[27] *See, e.g.,* NCTA Opposition to Petitions for Reconsideration at 5.

[28] *See, e.g.,* Time Warner February 21, 1995 response to Liberty's January 13, 1995 ex parte letter at 2.

[29] *Id.*

delivered over the same wire may cause needless confusion and expense for consumers, property owners and service providers. A common demarcation point could also facilitate competition among service providers by decreasing confusion over where a particular service's demarcation point is located, and reducing the possibility that overlapping or conflicting property rights could impede a transfer of service. Thus, we invite commenters to address the need for a common demarcation point generally and any legal or technical impediments to establishing a common demarcation point.

13. On the other hand, there may be technical and practical constraints on setting a common demarcation point. For example, if we set the demarcation point for multiple dwelling units at the minimum point of entry (usually in the basement), there may be concerns about the expense, disruption, and additional space required to install individual broadband wires and amplifiers to each unit, as well as the removal of any existing common wiring. In addition, placing the demarcation point for multiple dwelling unit buildings at the minimum point of entry raises the issue of whether and how a broadband service customer could purchase and maintain their own wiring and amplifiers outside of their individual unit. Moreover, it also raises the issue of who the "customer" is -- the landlord or the tenant -- who is entitled to control the wiring. Altering the cable demarcation point so that it is farther away from the subscriber's individual unit would also raise questions about compensation for the wire between the current cable demarcation point and any amended demarcation point. For instance, if a subscriber already owns the cable home wiring up to the current demarcation point, and the Commission moves the demarcation point to the minimum point of entry, how would the cable operator be compensated for the additional wiring if the subscriber wished to purchase it? On the other hand, if the subscriber elected not to purchase the additional wiring in this scenario, would the cable operator then have the right to remove that portion of the wiring? Alternatively, if we require a common demarcation point that is closer to each subscriber, such as where the existing cable wiring demarcation point is located, this could subject the currently unregulated telephone wiring between the minimum point of entry and the customer's premises to regulation. Altering our telephone demarcation point could therefore have a substantial effect on the markets for the installation and maintenance of inside wiring that have developed under the existing rules, as well as raise accounting issues for wiring that under our current rules is unregulated but would become regulated if we moved the demarcation point. In light of these considerations, we seek comment on where, if we establish a common demarcation point for cable and telephony services, we should establish such a common demarcation point. We also seek comment on whether, if we do not create a common demarcation point, we should continue to establish demarcation points based on the services provided over facilities (i.e. telephony or cable), or whether we should create demarcation points based upon the nature of the ultimate facilities used to deliver the service (i.e. narrowband termination facilities or broadband termination facilities).

14. We seek comment on whether and how our wiring rules can be structured to promote competition both in the markets for multichannel video programming delivery and in the market for telephony and advanced telecommunications services. We seek comment on

whether maintaining, or setting other different demarcation points for cable and telephone service, or services ultimately terminated over broadband or narrowband facilities, will affect our goal of promoting the development of advanced telecommunications services and competition for those services. We understand that telephone and cable service providers and consumers may find a multiple demarcation point approach confusing, especially because broadband wiring may serve as the conduit for both cable and telephony services. In addition, we seek comment on whether, and if so, how, the selection of a demarcation point for either network should depend upon the technical characteristics of the wiring and the current design considerations for telephone and cable services.

15. *Single Dwelling Units.* We seek comment on the effect of changing the telephone demarcation point to mirror the cable demarcation point (i.e., at or about 12 inches outside of where the cable wire enters the subscriber's premises).[30] Conversely, we seek comment on the effect of changing the demarcation point for cable, which presently does not employ protectors, to mirror the telephone demarcation point (i.e., at a point within 12 inches of the protector, or where there is no protector, up to 12 inches inside the customer's premises).[31] Finally, we seek comment on the consequences of permitting broadband service providers to choose where to locate the network demarcation point, within a range of 12 inches outside the customer's premises and 12 inches inside the customer's premises.

16. *Multiple Dwelling Units.* We seek comment on the effect of changing the telephone network demarcation point to mirror the cable demarcation point (i.e., at or about 12 inches outside of the point at which the cable wire enters the subscriber's premises).[32] Conversely, we seek comment on the effect of changing the cable demarcation point to mirror the telephone network demarcation point.[33] We also seek comment on whether the current cable and telephony demarcation points give reasonable access to competitive providers of either narrowband or broadband services, or whether it would better promote competition and otherwise be in the public interest to require that the demarcation points for broadband and narrowband networks be placed at a common point or at the point at which the broadband or narrowband line becomes dedicated to an individual subscriber's use.

17. We note that the record in our cable home wiring proceeding (MM Docket No. 92-260) indicates that the current cable demarcation point in multiple dwelling unit buildings

---

[30] 47 C.F.R. § 76.5(mm)(2).

[31] 47 C.F.R. § 68.3(b).

[32] 47 C.F.R. § 76.5(mm)(2).

[33] *See* para. 8, above.

may impede competition in the video programming delivery marketplace.[34] In this proceeding, we seek additional comment on the competitive effect and consumer impact of keeping or changing the current cable demarcation point -- not only on the video programming delivery marketplace, but on the broader telecommunications services market. Because we are concerned, however, that the current cable demarcation point may be impeding competition in the video services delivery marketplace, we intend to resolve this issue expeditiously.

18. We recognize that numerous other factors may affect the proper location of the cable network's demarcation point, as well as one's control over cable inside wiring and cable service generally. For example, single-family row units in condominiums or other residential settings may be provided cable service via a single, central access point, which may generate many of the same issues concerning the network demarcation point as are present in vertical multiple dwelling unit buildings. We seek comment on other factors related to the architecture of multiple dwelling unit premises that can affect the location of the demarcation point. We also seek comment on the consequences of changing the demarcation point or points, under one of the approaches described above, in light of the many various architectural settings in which subscribers may reside.

19. The Commission also seeks information on any technical constraints on moving either network's demarcation point. For instance, we note above that placing the cable network demarcation point at the minimum point of entry (i.e., in the basement of a multiple dwelling unit building) might not be economically practicable if cable amplifiers are required because amplifiers would need to be placed on each individual subscriber's line.

B. Connections

1. *Background*

a. *Cable Service Wiring*

20. An important technical consideration in the delivery of cable service and the connections employed in the technology used to deliver service, is the risk of cable signal leakage. Cable systems often deliver cable signals over the same frequencies as many over-the-air licensees, including air traffic control and police and fire safety communications. The Commission has established specific restrictions on cable operators' use of radio frequencies in order to reduce the potential for interference caused by cable leakage.[35] Such leaks may

---

[34] The record in MM Docket No. 92-260 has been incorporated herein by reference. *See* note 2.

[35] Section 76.605(a)(11) of the Commission's rules sets forth the maximum individual signal leakage limits for all cable operators using frequencies outside the broadcast

be caused by poor quality coaxial cable, or environmental or physical damage to the cable. Cable leakage interference can come from a single large leak in wiring or from the cumulative effect of many smaller leaks. Detection and repair of leaks on a continuing and periodic basis are necessary to reduce the danger of electromagnetic interference with other over-the-air services. Of particular concern are cable systems operating in the aeronautical radiocommunication bands or the aeronautical radionavigation bands. These systems are required to meet the strict offset and leakage requirements set forth in our rules which were developed to safeguard these safety-of-life over-the-air communications against harmful interference.[36] Systems operating in these bands at an average power level below 100 microwatts are still required to meet the general leakage requirements, but their operation need not meet our strict offset and leakage constraints.[37]

21. Another important technical consideration is the quality of the signal delivered to the subscriber's terminal.[38] Our rules require a minimum signal level at the subscriber's terminal to ensure that adequate levels are delivered to the television set or video cassette recorder and that a good quality picture is delivered. Signal strength can be lessened by the use of poor cable, signal splitting for additional television sets, improper termination and improper attachments of and to customer-owned premises equipment. Finally, carrier-to-noise levels is a parameter paramount to signal quality. High noise levels can drastically affect the signal quality at the subscriber's terminal as well. In light of signal leakage and quality concerns, our rules hold service providers responsible for ensuring proper connections.

b. *Telephone Connection*

22. By contrast, signal leakage interfering with over-the-air communications has not been a regulatory concern for telephone service because the transmission of telephony requires only a fraction of the signal power used to transmit video programming, and telephone signals are carried over a much narrower, as well as a different, portion of

---

television bands, while Sections 76.610 to 76.617 impose more stringent operating and monitoring requirements and limits on cumulative effect for cable systems operating in the bands that are used by aircraft for communications and navigation.

[36] 47 C.F.R. §§ 76.605(a) and 76.610-76.617.

[37] 47 C.F.R. § 76.610.

[38] Our cable signal quality rules ensure that analog downstream signals delivered to any subscriber terminals serviced and maintained by the cable operator be equivalent to a TASO Grade 2 Picture, which is defined as a picture of high enough quality to provide enjoyable viewing with impairments just perceptible. 47 C.F.R. § 76.605.

frequency spectrum than aeronautical communications.[39] Rather, the overall purpose of our telephone wiring regulations is to ensure that equipment connected to the telephone network and the methods used to make those connections do not cause harm to the telephone network or telephone company employees.[40] There is potential for harm to the network when inside wiring installation or maintenance is not performed in accordance with accepted standards and the Commission's rules. Harm, as defined in our rules, includes:

> electrical hazards to telephone company personnel, damage to telephone company equipment, malfunction of telephone company billing equipment, and degradation of service to persons other than the user of the subject terminal equipment, his calling or called party.[41]

23. As described above, access to telephone wiring is largely unregulated. The Commission has determined that allowing customers access to carrier-installed wiring on their premises for the purpose of connecting simple inside wiring will not impair the ability of carriers to provide adequate service to the public.[42] The Commission has found little inherent risk that a plug/jack arrangement will be installed incorrectly, or if actually installed incorrectly, will cause harm to the network.[43] However, if equipment does cause harm to the telephone network, or if the carrier reasonably determines that harm is imminent, the telephone company may discontinue service until the problem can be corrected.[44]

2. *Request for Comment*

24. We expect that broadband common carrier services will be delivered over the same aeronautical and public safety frequencies, and at similar levels of power, as are current cable television signals. Therefore, the same concerns regarding interference with over-the-air communications that we currently encounter only with traditional cable service may be implicated. We seek comment on the best method of extending our signal leakage limits that are currently applied only to traditional cable service to others who provide service over broadband facilities. Our cable signal leakage limits are based on individual leakage levels as

---

[39] Our rules merely specify the maximum leakage current under prescribed test conditions for all telephone connections. All registered terminal equipment and protective circuitry must adhere to these specifications. 47 C.F.R. § 68.304.

[40] 47 C.F.R. § 68.1.

[41] 47 C.F.R. § 68.3.

[42] *See Telephone Inside Wiring Report and Order*, 5 FCC Rcd at 4691.

[43] *See* Section II. G., *infra*, for a discussion of customer premises equipment.

[44] 47 C.F.R. § 68.108.

well as maximum allowable cumulative leakage levels and frequency separations from over-the-air users. In this light, we solicit comment on whether these requirements, which take effect once signal leakage levels reach some threshold, are sufficient or should be changed to safeguard against interference by any broadband service provider.

25. We also request comment on whether our cable signal quality standards should be extended to other broadband video signal providers or whether, in a future competitive environment, quality standards may be unnecessary because signal quality will be one of the factors highlighted by broadband providers in competing for business. If the signal quality requirements are to be maintained and extended to other broadband providers, we believe that the issues of access to wiring prior to termination of service, ownership and control of the wiring, and the location of the demarcation point will need to be addressed in the context of how these issues relate to any changes in our signal quality requirements. For example, at what point, at the demarcation point or at the television, should the signal quality standards be measured.

26. Finally, we note that underlying all of the discussion and proposals outlined in this item is a concern for system integrity, including any increased risk of signal leakage or decrease in signal quality. We thus seek comment generally on how any new or revised regulatory approaches proposed in this *NPRM* may impact upon these considerations.

3. *Means of Connection*

a. *Background*

27. The Commission's common carrier rules define the technical specifications for any jacks that interface with the telephone network. The rules state that "any jack installed by the telephone company at, or constituting, the demarcation point shall conform to subpart F of 47 C.F.R. Part 68. Subject to the requirements of section 68.213 of our rules, connection of wiring and terminal equipment to the telephone network may be through a jack conforming to subpart F or by direct attachment to carrier installed wiring. . . ."[45] The rules also provide the means of connection for data equipment. This standardization ensures that network integrity is maintained, protects telephone company employees, facilitates the installation of equipment by non-telephone company employees, and promotes competition for inside wiring services and telephone customer premises equipment.

28. Even though the Commission does not have specific rules governing the type of connectors used by the cable industry, operators almost exclusively employ "F-type connectors" for connection between coaxial wire and equipment, which, in part, are designed to prevent signal leakage. These F-type connectors are installed at the ends of coaxial cable

[45] 47 C.F.R. § 68.213.

in order to attach the wiring to customer premises equipment such as televisions, videocassette recorders and set-top boxes. (F-type connectors must be properly installed following the manufacturers' installation procedure in order to prevent signal leakage and other technical problems.)[46]

b. *Request for Comment*

29. Various benefits for subscribers and service providers may result from defined technical standards for connections to broadband services. For example, uniform standards for broadband connections could (a) ensure network integrity, (b) decrease the frequency of incorrect connection by alternative providers, which may decrease concerns over signal leakage and substandard signal quality, and (c) simplify the use of existing wire and connections by alternative service providers, which should facilitate competition among providers and benefit consumers through improved service and competitive prices. On the other hand, we note that, at least in the cable industry, the use of "F-connectors" is already prevalent; thus, Commission involvement may not be necessary. In addition, regulatory oversight of this area could limit the flexibility of providers to respond to technical improvements in standard jacks and connectors. In this light, we seek comment on whether the Commission should adopt technical requirements for standard jacks and connectors for broadband or narrowband networks. If standards are necessary, how should factors such as electronics and the physical features of the jack or connector be addressed in designing such standards? All responses to this and the above inquiries should address the relative need for standards for protectors, jacks and connectors that will maintain system integrity (i.e., picture and audio quality, signal reliability, minimal signal leakage), while giving other providers ease of connection and thus facilitate competition among telecommunications services providers.

30. As stated above, we anticipate that future telecommunications services providers may deliver multiple telecommunications services, such as telephony and video programming, over a single broadband wire. We solicit comment on whether the Commission should establish technical standards for connections to cable networks or broadband services, where multiple services are delivered over a single wire. We note that a single standard may facilitate competition among providers by standardizing and simplifying the type of connection all providers must use. In the alternative, we seek comment on whether we should require that all connections to either the telephone network or cable systems use only the jacks meeting Commission standards or their technical equivalent.

---

[46] *See* Section II. G., *infra* (discussing customer premises equipment).

C. Regulation of Simple and Complex, and Residential and Non-Residential Wiring

1. *Background*

a. Telephone Provisions: Simple vs. Complex Wiring

31. The degree to which the Commission regulates telephone inside wiring depends largely on whether the subscriber requires simple wiring or complex wiring to receive service. Simple inside wiring includes all one and two line telephone wiring (including the associated jacks) on the customer's side of the demarcation point, and is often called "non-system premise wiring" or "customer premise wiring."[47] Complex wiring, also called "intrasystem wiring," includes all wiring of three or more twisted pairs and its associated components (e.g., connecting blocks, terminal boxes, conduit) located on the customer's side of the demarcation point that connects telephones, facsimile machines, modems, and other devices to each other or to the common equipment of a private branch exchange ("PBX") or key system,[48] when this wiring is inside a building or between a customer's buildings located on the same or contiguous property not separated by public property.[49]

32. Most single dwelling units require only simple wiring, while multiple dwelling units and commercial settings require complex intrasystem wiring. Section 68.213 of our rules governs the connection of simple wiring to the network[50] and Section 68.215 governs

---

[47] The Commission has proposed to expand the scope of simple inside wiring to encompass wiring of up to four lines. *Telephone Inside Wiring Report and Order*, 5 FCC Rcd at 4701.

[48] A key system is a local telephone system in a small office complex or home that permits all users to obtain access to lines on the public telephone network and to communicate with each other without the service of an operator by pressing one or two keys.

[49] *Report and Order* in CC Docket 82-681, In the Matter of Modification to the Uniform System of Accounts for Class A and Class B Telephone Companies, a proceeding required by the decision to detariff customer premises equipment and the proposal to detariff customer provided cable/wiring installed as part of an intrasystem of PBXs and key systems, 48 FR 50534, 50535 n.4 (Nov. 2, 1983) ("*CPE Report and Order*"). Wire meeting the other criteria for complex inside wire and crossing a public right-of-way, however, may be considered intrasystem wiring if approved by an appropriate state or local authority. *Id.* at 50541.

[50] 47 C.F.R. § 68.213.

the connection of complex intrasystem wiring.[51] We have not allowed customers to connect to the public telephone network with complex wiring other than through a telephone company-provided jack. In the interstate jurisdiction, we have deregulated the installation and maintenance of both simple and complex inside wire. In the intrastate jurisdiction, however, we have allowed the states to regulate the prices, terms and conditions on which simple inside wire services are offered to the public.[52]

b. *Cable Service Provisions*

33. As described above, our cable inside wiring rules address three primary areas: (1) technical standards; (2) the disposition of wiring after termination of service; and (3) rates for the wiring installation and maintenance. First, the Commission's technical standards apply only to wiring that a cable operator installs and maintains. For example, if the landlord of a multiple dwelling unit building contracts with a cable operator to receive bulk service, and then delivers service to the individual tenants over wiring maintained by the landlord, and receives the tenants' payment for the service, then the Commission's technical standards for signal and picture quality will not apply to either the cable operator or the landlord. This caveat does not affect the Commission's standards concerning signal leakage, however, because these requirements must be met regardless of who provides the final service link to the individual subscriber or who actually receives payment from subscribers for cable service.[53]

34. Second, rules adopted pursuant to Section 16(d) of the 1992 Cable Act governing the disposition of wiring upon termination of service apply only to cable wiring installed by cable operators in residential dwelling units.[54] Both the House and Senate Reports and the 1992 Cable Act clearly identify Section 16(d) as applying to home wiring -- i.e., wiring "inside the home."[55] Third, rates for equipment used to receive residential cable service, including inside wiring, are regulated by the local franchising authority pursuant to rules the Commission has promulgated under the 1992 Cable Act.[56] The 1992 Cable Act and the Commission's implementing regulations provide that for regulated basic cable service,

---

[51] 47 C.F.R. § 68.215.

[52] *See infra* paras. 52-54.

[53] *See generally* 47 C.F.R. §§ 76.601 - 605.

[54] *See, Cable Wiring Order,* 8 FCC Rcd at 1436.

[55] Senate Report at 23; *see also* House Report at 118 (also entitling discussion of Section 16(d) "Home Wiring" and using terms such as "subscriber's home" and "individual dwelling unit").

[56] *See* 47 C.F.R. §§ 76.922 - 76.923, 76.944 -76.945.

subscribers must be protected from unreasonable rates, which include equipment rates. The issue of whether non-residential cable service rates (including equipment rates) are subject to regulation is part of an on-going rulemaking proceeding in which parties already have submitted comment.

2. *Request for Comment*

35. The respective approaches to regulating telephone and cable inside wiring employed in multiple dwelling unit buildings and non-residential settings diverge. Installation and maintenance of telephone inside wiring (complex or intrasystem) is largely unregulated. On the other hand, application of our rules governing cable inside wiring will depend on what aspect of our rules is in question, e.g., application of our technical standards will depend on whether the cable operator or some other entity, such as a landlord, actually charges for the service, while the rules setting forth disposition procedures apply regardless of who actually delivers service to the subscriber. We anticipate that telecommunications service providers in the future will provide both telephony and video programming services, as well as other services. These services may be delivered over multiple wires or over a single broadband wire. We note that the technical regulations for telephony often apply to twisted wire pair or narrowband technology, whereas the cable regulations apply to coaxial cable or broadband technology. We believe that separate regulatory regimes (both technical and ratemaking) for telephone and cable inside wiring may impede the delivery and possibly development, of broadband and other services to the public because the differing schemes may cause needless confusion for providers and consumers. Therefore, we seek comment on whether the Commission can and should harmonize the definitions within the common carrier and cable rules with regard to simple versus complex wiring; and residential versus non-residential wiring.

36. We also seek specific comment on whether the complex telephone wiring configurations and cable inside wiring configurations employed in multiple dwelling unit buildings or non-residential settings, respectively, are similar, and if so, whether this similarity means that complex telephone wiring and similarly employed cable inside wiring should be subject to similar rules. Would our telephone wiring rules, cable wiring rules, or some combination of both, be most appropriate? We seek comment on the optimal regulatory regime for wiring used to deliver both telephony and video programming as well as other services, i.e., the complex versus simple dichotomy, our cable wiring regulations, or some other approach. For example, would it be sensible to explore treating different types of cable inside wiring differently based on their technical characteristics, similar to the complex versus simple distinction in the regulation of telephone wiring? In addition, we seek comment on regulating wiring based on some other approach, such as the type of wiring used (i.e., twisted copper pair, coaxial or fiber optic). In this vein, would it be appropriate to establish individual simple and complex wiring definitions for each type of wiring? Finally, we seek comment on how any changes in our rules concerning the above aspects of wiring may affect system integrity and reliability.

37. We seek comment on how any changes in our rules concerning these aspects of wiring may affect signal leakage and signal quality. We also seek comment on how any of the above changes to our rules may affect competition in the telephone and cable markets.

D. Customer Access to Wiring

1. *Cable Wiring Provisions*

38. Section 16(d) of the 1992 Cable Act requires the Commission to "prescribe rules concerning the disposition, after a subscriber to a cable system terminates service, of any cable installed by the cable operator within the premises of such subscriber."[57] According to the legislative history of this provision, Congress sought to protect cable customers from unnecessary disruption and expense caused by the removal of home wiring and to allow subscribers to use the wiring for alternative multichannel video programming delivery systems.[58] The Commission's regulations implementing Section 16(d) provide that, when a customer voluntarily terminates cable service, the cable operator may not remove the cable home wiring unless it has first given that subscriber the opportunity to acquire the wiring at its per-foot replacement cost and the subscriber declines. If the subscriber declines to purchase the wiring, the operator must remove the wiring within 30 days (now seven business days) or make no subsequent attempt to remove it or restrict its use.[59] This rule does not apply where the subscriber already owns the home wiring.[60]

39. The current cable home wiring rules do not require cable operators to permit subscribers to provide and install their own cable home wiring, or to move or rearrange operator-owned cable home wiring. Cable operator practices with respect to home wiring, however, currently differ: some permit customers to install their own wiring or to rearrange and to perform maintenance on the operator-owned home wiring; others do not. In the *Cable Wiring Order*, the Commission indicated that broader home wiring rules could foster competition and might be considered in future proceedings.[61]

---

[57] 47 U.S.C. § 544(i).

[58] *See* House Report at 118; Senate Report at 23; *see also Cable Wiring Order*, 8 FCC Rcd at 1435.

[59] *See* 47 C.F.R. § 76.802. In the *First Order on Reconsideration and Further Notice of Proposed Rulemaking* in MM Docket No. 92-260, *supra* note 2, the Commission revises Section 76.802 of our rules to shorten to seven business days the time period within which the cable operator may remove its wiring.

[60] 47 C.F.R. § 76.801.

[61] *Cable Wiring Order*, 8 FCC Rcd at 1435-36.

2. *Telephone Provisions*

40. The Commission has deregulated the installation and maintenance of both complex and simple telephone inside wire. As explained above, we first acted with regard to the installation of complex wiring, which is "new intrasystem wiring installed with new CPE systems."[62] Since we had deregulated the installation of new CPE systems in *Computer II*,[63] it was inconsistent to have complex wiring installed under tariff. Therefore, to foster competition in complex wiring installation, we deregulated the installation of complex wiring in the same way and on the same basis as we had deregulated CPE in *Computer II*.[64] We subsequently deregulated the installation of simple inside wiring and maintenance of all inside wiring, effective January 1, 1987.[65] Through these actions, we intended to make the cost-causative customer bear the costs of connecting CPE, including inside wiring, to the telephone network and, thus, to produce immediate cost savings that would be passed on to ratepayers.[66]

41. To complete the deregulation of inside wire, the Commission prohibited telephone companies from imposing restrictions on inside wire that would prevent customers from removing, replacing, rearranging or maintaining inside wire using sources of their own choosing. In addition, we precluded the telephone companies from requiring customers to purchase or to pay a charge for using inside wire that had been previously installed or maintained under tariff.[67] The Commission contemplated that, from the deregulation of

---

[62] *CPE Report and Order*, 48 FR at 50541.

[63] *Amendment of Section 64.702 of the Commission's Rules and Regulations*, Final Decision, 77 F.C.C.2d 384 ("*Computer II*"), *modified on reconsideration*, 84 F.C.C.2d 50 (1980), *further modified on reconsideration*, 88 F.C.C.2d 512 (1981), *aff'd sub nom. Computer and Communications Industry Ass'n v. FCC*, 693 F.2d 198 (D.C. Cir. 1982) *cert. denied sub nom. Louisiana Public Service Commission v. U.S.*, 461 U.S. 938 (1983), *aff'd on second further reconsideration*, FCC 84-190 (released May 4, 1984).

[64] *CPE Report and Order*, 48 FR at 50541.

[65] *Second Report and Order* in CC Docket No. 79-105 (In the Matter of Detariffing the Installation and Maintenance of Inside Wiring), 51 FR 8498 (Mar. 12, 1986) ("*Telephone Inside Wiring Second Report and Order*").

[66] *Id.*

[67] *Reconsideration Telephone Inside Wiring Second Report and Order*, 1 FCC Rcd 1190, 1195 (1986).

inside wire, in combination with the deregulation of CPE undertaken in *Computer II*,[68] would come unregulated and highly competitive markets for all telephone-related services performed on the customer side of the demarcation point separating the customer premises from the telephone network.[69]

3. *Request for Comment*

42. We tentatively conclude that there is no reason to change our rules giving consumers the right to access their narrowband wiring inside the demarcation point, whether that wiring is used to provide voice, video or data services. We seek comment on this tentative conclusion. We also seek comment on whether the Commission should establish rules that give consumers the right, on their side of the demarcation point, to provide and to install their own broadband inside wiring and to access broadband wiring (for purposes of, for example, installing additional outlets, performing maintenance or reconfiguring existing wiring) on their premises which has been installed and is owned by the broadband service provider. In particular, we seek comment on whether consumers should have such a right if: (a) the broadband wire carries both cable and common carrier services ("joint use"); or (b) the broadband wire carries cable services only.

43. Access to broadband inside wiring *prior* to termination of service would allow consumers to select who will install and maintain their broadband wire (e.g., someone other than the cable operator, such as a commercial contractor, or the consumer himself or herself). The resulting competition in the wiring marketplace might also reduce the amount of maintenance fees and service charges a subscriber pays to the broadband service provider.[70] In addition, petitioners assert that pretermination access on the consumer's side of the demarcation point would increase competition, promote market entry, produce cost savings, and create a competitive environment for the development of telecommunications services.[71] According to petitioners, if the consumer has access to and control over the inside wiring prior to terminating service, he or she may be less likely to perceive that it is difficult to change to an alternative broadband service provider. Moreover, in our view, pretermination access to broadband wiring may more closely parallel the access telephone customers have to their narrowband inside wiring. We would expect that these rules would provide broadband service consumers with many of the same advantages that deregulation has provided

---

[68] *Computer II*, 77 F.C.C.2d at 388.

[69] *Further Notice of Inquiry* in CC Docket No. 79-105 (In the Matter of Detariffing the Installation and Maintenance of Inside Wiring), 86 F.C.C.2d 885, 886-87 (1981).

[70] *See* Senate Report at 23 (urging the Commission to adopt policies that will protect consumers against the imposition of unnecessary charges, including those for home wiring maintenance).

[71] MAP Petition for Rulemaking at 7-8.

narrowband customers. This parity might further assist competitors in providing both broadband and narrowband services over the same wire, thus increasing competition among multiple service providers.

44. In this context, we ask whether and how broadening the cable rules to establish the subscribers' right to provide and to install their own cable inside wiring and to access cable operator-owned inside wiring would (a) promote consumer choice; (b) foster competition among multichannel video programming service providers, thus lowering prices and encouraging technological innovation; and (c) facilitate the provision of more than one type of telecommunications service (e.g., telephone and video) by different types of companies. We also request comment generally on how to protect against signal leakage and to maintain the signal quality delivered over the coaxial cable if subscribers are given pretermination access to broadband cable inside wiring.

45. We seek comment on whether the Commission has authority under the Communications Act to promulgate cable inside wiring rules requiring pretermination access, both when the wiring is used jointly by cable and common carrier services and when the wiring is used solely for cable services. In particular, we ask whether, in the joint use context, the inside wiring used to transmit interstate telecommunications services is so inseparable from the wiring used to transmit the cable services that consumers should have the right to access the wiring under the Commission's current telephone rules. We note that, while the telephone rules may provide a useful model for broadband wiring, cable operators may not be regulated as common carriers "by reason of providing any cable service."[72] We believe, however, that simply applying rules to cable that are the same as, or similar to, the telephone inside wiring rules is not tantamount to treating cable operators as common carriers. We nevertheless request comment on this interpretation of the Communications Act. We also ask commenters to address the issue of whether permitting pretermination access would constitute an impermissible "taking" of property without just compensation, in violation of cable operators' Fifth Amendment rights.

46. We also ask whether the best way to ensure that subscribers are permitted to own and to access cable inside wiring, whether by buying it or installing it prior to termination of service, might be to deregulate cable inside wiring rates, much the same as telephone inside wiring has been deregulated. We ask whether the introduction of competition in the markets for cable inside wiring would force cable operators to permit pretermination access where there is subscriber demand. We seek comment on whether we have the statutory authority to deregulate cable home wiring rates. We direct the parties to Section 16(d) of the 1992 Cable Act and Section 623(b) of the Communications Act, as amended, and note that Congress specifically expressed a "[p]reference for competition" over regulation in setting rates for

---

[72] 47 U.S.C. §541(c); House Report at 118. To the extent that a cable system is not providing cable service, this provision does not preclude its regulation as a common carrier.

cable services.[73] In addition, we seek comment on whether and on what basis the Commission should establish a transition period, during which equipment rates would remain regulated, while the market for cable home wiring becomes competitive. We also ask for comment on whether, if the Commission is statutorily required to regulate cable inside wiring rates, we should provide incentives to cable operators to permit pretermination access, for example, by providing that, if an operator allows subscribers to access the home wiring prior to termination of service, or sells the wiring to the subscriber (upon installation or any time thereafter), the operator may then charge the subscriber whatever rate it wishes to reconfigure or perform maintenance on the wiring.

47. The general intent of our rules in this area will be to maximize the convenience of subscribers seeking to take advantage of competition in the marketplace for the provision of video programming. As described above, our rules grant a subscriber the right to purchase the inside wiring after voluntarily terminating cable service. If the subscriber declines to purchase the wiring, the operator may elect to the remove the wiring. We believe that in some cases this process may needlessly complicate a subscriber's effort to select a new service provider. The policy requiring this process, however, obviously would not apply if the subscriber already owned the wiring, and a customer in this position simply may permit the competing provider to use the existing wire immediately after the subscriber terminates the incumbent provider's service. In order to establish this transfer of service, we thus seek comment on establishing a requirement that subscribers be permitted to purchase their inside wiring upon installation of cable service, on a going-forward basis. We note that our current rules, as Title VI requires, already permit cable operators to recover the costs of inside wiring installation.[74] We solicit comment on whether we should require cable operators to sell the wiring upon installation of cable service. We seek comment on the best way to achieve this. For example, should we require cable operators to include the cost of the wiring as well as the cost of labor to install the wiring in the cost of installation of cable service? We seek comment on whether it is necessary for the Commission to detail how these costs are to be recovered, *e.g.*, in a one-time initial payment, or on a monthly basis for some maximum number of months, and whether the Commission should do so. Under the latter approach, we would intend for full ownership of the wiring to be vested in the subscriber once the subscriber pays some portion, or all, of the costs associated with the wiring. We seek comment on the point at which full ownership of the wiring should be vested in the subscriber. We believe that cable operators would need time to implement this approach; therefore, we seek comment on requiring cable operators to adopt this approach as of some date certain in the future, *e.g.*, six, 12 or 18 months following adoption of the requirement.

48. Alternatively, we seek comment on whether the Commission can and should create a presumption that the subscriber owns his or her cable inside wiring. As we noted in

---

[73] 47 U.S.C. § 543(a)(2).

[74] *See* 47 U.S.C. § 543(b)(3).

the *Cable Wiring Order*, the subscriber often already owns the home wiring, such as where the subscriber was charged for the wiring upon installation,[75] or, at least in the case of single family dwellings, where the applicable state or local law treats the wire as a "fixture," or the previous occupant already owned the home wiring, either by purchasing the wiring upon voluntary termination of service or because the operator failed to remove it within the time allowable under our rules. We seek comment on whether this presumption could be rebutted by the cable operator or be an irrebuttable presumption. If rebuttable, we seek comment on what kind of showing cable operators would have to make to overcome a presumption that the subscriber owns his or her home wiring, what type of records operators would be required to keep, any constitutional or statutory impediments to such a presumption, and when such a process would occur. We also seek comment on our concern that, at least for existing wiring, operators may possess inadequate records to demonstrate ownership. If irrebuttable, we seek comment on how such a relinquishment of ownership rights could be structured consistent with constitutional and statutory requirements, and what deadlines should be imposed in order to permit cable operators to obtain full compensation for their inside wiring costs.

4. *Compensation for Wiring*

a. *Background*

49. The Commission's rules compensate cable operators for their costs of installing the subscriber's cable home wiring. With respect to telephone wiring, as previously noted, the Commission deregulated the installation of simple inside wiring and the maintenance of all inside wiring, effective January 1, 1987.[76] We then precluded carriers from imposing restrictions upon the removal, replacement, rearrangement or maintenance of inside wiring.[77]

50. Currently, cable operators must elect a uniform installation charge that is based upon either the product of the hourly service charge and the person hours of the visit, or the product of the hourly service charge and the average hours spent per installation visit.[78] Further, the rules prescribe a per-foot replacement cost (the product of the approximate length of the cable on the customer's side of the demarcation point and the value of the wire itself) upon termination of service. We stated in the *Cable Wiring Order* that the per-foot charge should be based on the replacement cost of coaxial cable in the community, and gave as an example for which the cost was approximately six cents per foot.[79]

---

[75] 8 FCC Rcd at 1437.

[76] *See supra* Section II.D. (discussing customer access to wiring).

[77] *See* 1 FCC Rcd at 1195.

[78] 47 C.F.R. § 76.923.

[79] *Cable Wiring Order*, 8 FCC Rcd at n.39.

b. *Request for Comment*

51. We seek comment on whether our current rules for compensation of broadband cable should change if, for example, we move the demarcation point for cable systems to the minimum point of entry in multiple dwelling unit buildings or some other point, including some point farther than 12 inches from the subscriber's premises. We also seek comment on providing compensation to telephone companies for the cost of an additional segment of what is now a customer's narrowband telephone loop, if it is determined that the demarcation point for the telephone network will be placed 12 inches outside the customer's premises, or at some point inside of the minimum point of entry.

E. Dual Regulation

1. *Background*

52. As described above, the Commission has established rules to govern the technical performance of cable systems,[80] the disposition of wiring upon termination of service,[81] and subscriber rates for the installation, maintenance and sale of equipment necessary to receive cable service generally, including inside wiring.[82] The local franchising authority generally is the first line of enforcement of all such rules, while the Commission will, either informally or by rule, resolve disputes that may arise between a cable operator and the local franchising authority. For example, local franchising authorities are directed under our rules to enforce the federal technical standards. A franchise authority, however, may petition the Commission for a waiver to establish cable service technical standards in the franchise area that exceed the federal standards.[83] Similarly, under our cable service rate regulations, the Commission has established general regulations setting forth cable service rate computations that local franchising authorities and cable operators must use only if the local franchising authority is certified to regulate cable service. With respect to wiring, an operator will propose equipment rates, on which subscribers' cable service rates are based in part, to local franchising authorities. An operator may appeal, however, to the Commission for resolution of any dispute resulting from the local franchising authority's rejection of the proposed equipment rates.[84]

53. Because most local telephone exchange facilities are used jointly to provide

---

[80] 47 C.F.R. §§ 76.601 -76. 630.

[81] 47 C.F.R. § 76.802.

[82] 47 C.F.R. §§ 76.922 -76. 924.

[83] 47 C.F.R. § 76.605 Note 6.

[84] 47 C.F.R. §§ 76.944, 76. 945.